## Guide for EMS: Quick Recognition of Toxic Agents in the Environment

## **CYANIDE**

**General**: It would be unlikely that only one person (victim) would be involved, more likely there would be multiple victims and there would likely be a difference in number of victims per area depending on distance from the probable source of the toxin. The further one is from the source, the fewer casualties one would expect. Pets, stray or wild animals might also be affected so it would be important to take note of these as well as human victims. There may be odors apparent. With the exception of mustard blistering agents and radiation agents, the effects would be seen immediately.

It is imperative that the rescuer be protected from exposure! In all potential "toxin" exposures the law of distance applies, get the victim as far away from the source of exposure in the fastest time as possible! Generally the dose of the toxin falls off rapidly with distance. The treatment will be supportive and attention to the ABCs is important. Over treatment may produce problems as well as under treatment!

**Symptoms:** There may be no distinguishing physical findings or symptoms, particularly at low concentrations, rapid death at high concentrations.

**Sudden collapse**, convulsions or death after exposure, generally the victims are **acyanotic** (often retain the normal pink coloration until after death), there may be an odor of bitter almonds, often victims will complain of dizziness, weakness and anxiety.

**Treatment:** Time is of the essence, antidotal therapy is effective if administered early. Do not waste time with any efforts at decontamination; removal from exposure is sufficient decontamination for gas exposure anyway!

- Conscious, breathing: do not administer any antidote
- Unconscious, not breathing: crush an amyl nitrite ampule and put it into the mask of a bag ventilator and administer for 30 seconds every minute until IV access is achieved, then administer sodium nitrite from the cyanide antidote kit followed by the sodium thiosulfate (give the full vial, 10ml, IV over 5 minutes while monitoring for hypotension to an adult, ½ a vial to a 5-10 yo size child, ¼ of a vial in a child under 5 watching vital signs very closely to avoid overdosing a small child).

For further help call:



Note: This information was produced in consult with the New Jersey Poison Information and Education System.